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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/792,288	03/03/2004	Thomas W. Wideman	FPY-089.01	3160
25181	7590	05/16/2006	EXAMINER NAKARANI, DHIRAJLAL S	
FOLEY HOAG, LLP PATENT GROUP, WORLD TRADE CENTER WEST 155 SEAPORT BLVD BOSTON, MA 02110			ART UNIT 1773	PAPER NUMBER

DATE MAILED: 05/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/792,288	WIDEMAN ET AL.
	Examiner	Art Unit
	D. S. Nakarani	1773

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 28 February 2006.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 26-28 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-25 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 03 March 2004 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/25/2004</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

1. Applicant's election with traverse of Group I, claims 1-25, in the reply filed on February 28, 2006 is acknowledged. The traversal is on the ground(s) that examination of claims simultaneously would place no undue burden on the Examiner, as examination of claims 26-28 necessarily entails a search of the subject matter of claims 1-25. This is not found persuasive because the examination of method claims 26-28 requires search in class 156 and does not require search in class 428 while the invention of Group I, claims 1-25, does not require search in class 156. Therefore the examination of both inventions simultaneously would place undue burden on the Examiner.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 26-28 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on February 28, 2006.

3. The disclosure is objected to because of the following informalities: the specification as filed has numerous errors or inconsistencies. As for example the structure of silicon modified polyolefin given in paragraph 0059 appears to require R₁ either chemical bond or bivalent organic or inorganic moiety. The R₁ specified in paragraph 0062 includes monovalent radical or element such as alkyl, alkenyl, alkynyl,

alkoxy, hydroxyl, hydrogen etc. In paragraph 0033, the "term silyl means $-\text{SiR}_3$ where R here can be H, C, O, Si, halogen or heteroatom" cannot be understood since as per chemical dictionary the term "silyl" means silicyl. The radical $-\text{SiH}_3$, analogous to the methyl group $-\text{CH}_3$ (See page 533 of Grant & Hackh's Chemical Dictionary (Copy enclosed)). Therefore when R is other than H, the term silyl cannot be understood. Applicants are strongly urged to review entire specification for additional inconsistencies and correct as necessary **without** introducing new matter.

Appropriate correction is required.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 2-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 2 and 3, the phrases "organic or inorganic moiety", "organic moiety" and "inorganic moiety" renders claims indefinite. It is not clear what is meant by claimed moiety? The claimed moiety is bivalent or monovalent? Clarification and/or correction requested. The term "inorganic moiety" neither defined nor exemplified in the specification. Therefore cannot be understood. As per structural formula in claims 2 and 3, R_1 and R_2 appear to be either chemical bond or bivalent organic moiety. However in claims 7, 8, 10, 18 and 21, disclosed species includes monovalent radicals such as

Art Unit: 1773

alkyl, alkenyl, alkynyl, hydroxyl etc. Therefore cannot be understood. Furthermore, the X₁ in the structural formulae specified as being "organic or inorganic moiety" which cannot be understood. Does this moiety require to be reactive or non reactive.

Clarification and/or correction requested.

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1, 24 and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Botros (U. S. Patent 6,894,115 B2).

Botros discloses a pipe comprising PE (polyethylene layer)/adhesive layer/aluminum (metal) layer/adhesive layer/ PEX (cross-linked polyethylene layer). The aluminum layer is considered as non-olefin layer. The adhesive layer comprises polyolefin e.g. high density polyethylene (HDPE) grafted with vinyl trimethoxy silane (Col. 7, lines 50-63, col. 8, lines 10-65 and col. 5, line 59 to col.6, line 31). The in above

mentioned pipe structure portion "PEX" is considered as polyolefin layer and portion "PE/adhesive layer/ aluminum layer" considered as composite layer of claim 1.

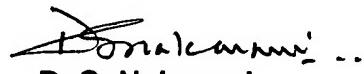
8. Receipt of Information Disclosure Statement filed August 25, 2004 is acknowledged. All documents, AA-AL, recited on PTOL 1449 have been considered. All recited documents, AA-AI and AL, except documents AJ and AK, have been made of record. Documents AJ and AK have been crossed-out since these documents lacks publication date. These documents AJ and AK will not be listed on the face of patent issued from this application. If applicants are desirous to list these documents on patent issued from this application, documents AJ and AK should be provided showing publication date with PTOL 1449.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to D. S. Nakarani whose telephone number is (571) 272-1512. The examiner can normally be reached on Tuesday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on (571) 272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1773

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


D. S. Nakarani
Primary Examiner
Art Unit 1773

DSN
May 12, 2006.